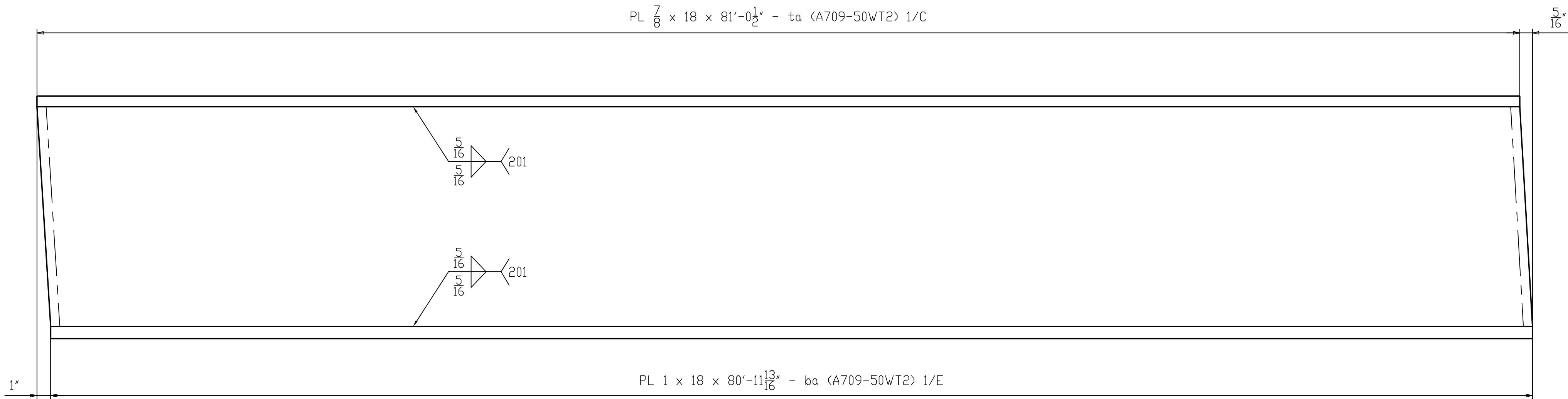


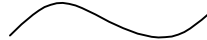
CAMBER DIAGRAM FOR 1G1A, 2G2A, 3G3A, 4G4A, 5G5A, 6G6A




FLANGE DIAGRAM FOR 1G1A, 2G2A, 3G3A, 4G4A, 5G5A, 6G6A

NOTES:

1. FOR GENERAL NOTES SEE SHEET GN1.
2. T2 - DENOTES MATERIAL SUBJECT TO CHARPY V-NOTCH TEST FOR ZONE 2


0					
REV.	DATE	REMARKS	DWN	CHK	APVL
MATERIAL: XXXX		SURFACE PREP. & PAINT:	HOLES: AS NOTED		SHOP BOLTS: AS NOTED
DESCRIPTION: CAMBER & FLANGE DIAGRAMS					




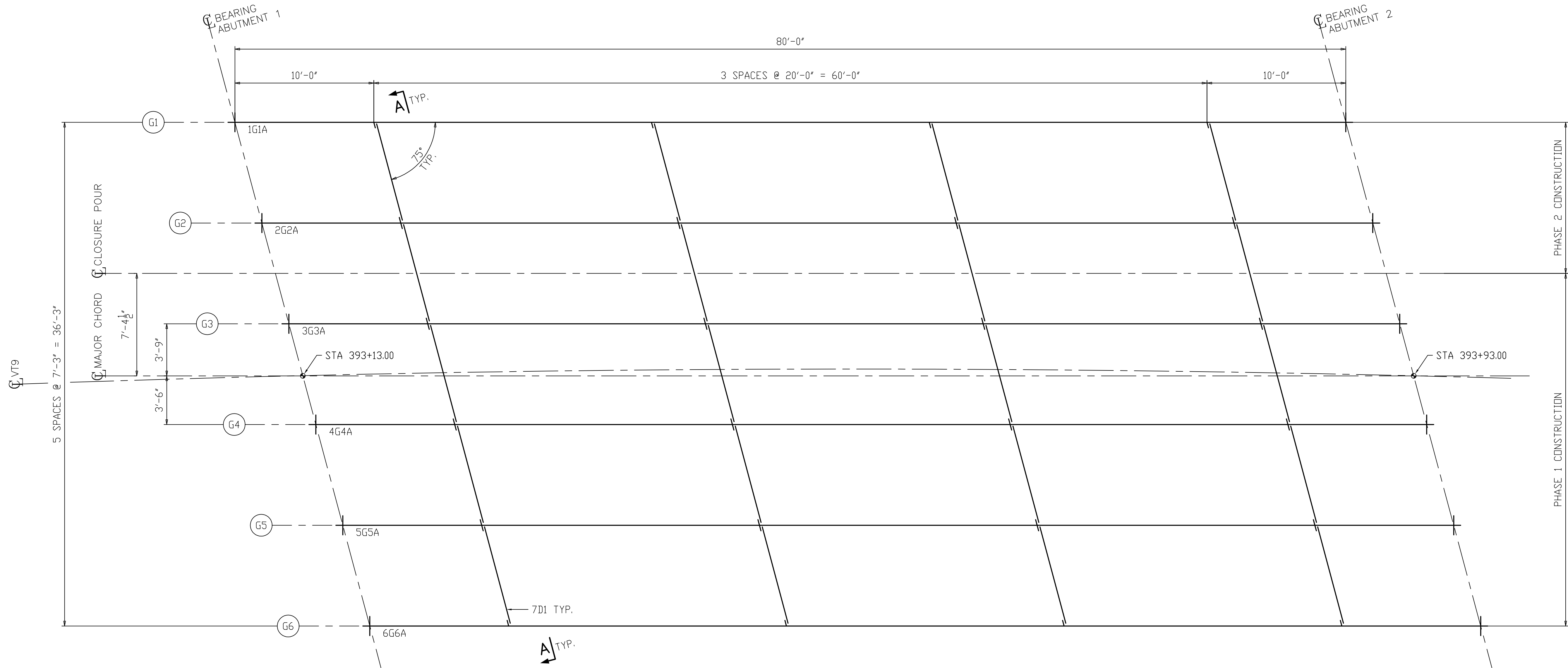
CASCO BAY STEEL STRUCTURES, INC.

1 WALLACE AVE. PHONE (207) 780-6722

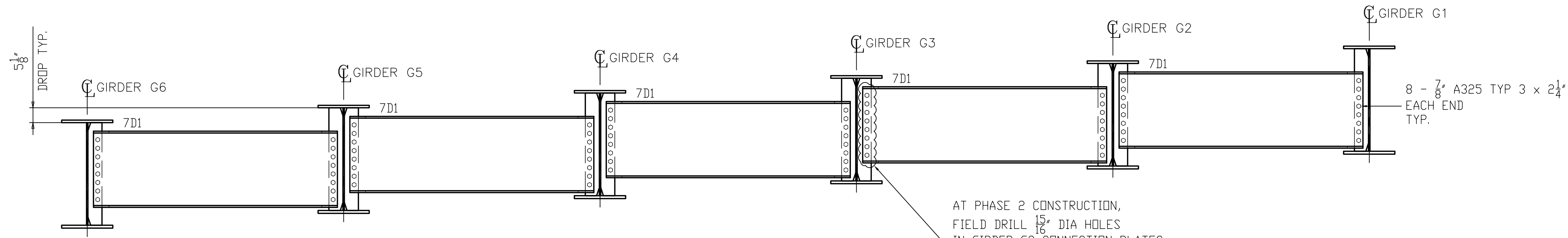
SOUTH PORTLAND, ME 04106 FAX. (207) 780-6726



STRUCTURE: PRINCIPAL ARTERIAL OVER WHETSTONE BROOK STATE ROUTE VT9, BRIDGE NO. 48 TOWN OF MARLBORO/COUNTY OF WINDHAM STATE OF VERMONT AGENCY OF TRANSPORTATION		DRAWN: SL	DATE: 04/17
LOCATION: MARLBORO / WINDHAM, VT		CHKD: RA	DATE: 04/22
PROJ NO. BRJ 010-1(43)		JOB NO.	DWG NO. C1
CUSTOMER: RENAUD BROS., INC.		570-2	REV. 



FRAMING PLAN






SECTION A-A

AT PHASE 2 CONSTRUCTION,
FIELD DRILL $\frac{15}{16}$ " DIA HOLES
IN GIRDER G3 CONNECTION PLATES
USING 7D1 BOLTED IN GIRDER G2
AS TEMPLATE




NOTES:

1. FOR GENERAL NOTES SEE SHEET GNI.

0									
REV.	DATE	REMARKS			DWN	CHK	APVL	SHOP	
MATERIAL:		SURFACE PREP. & PAINT:		HOLES: AS NOTED		SHOP BOLTS: AS NOTED			
DESCRIPTION:		FRAMING PLAN							
<div>CASCO BAY STEEL STRUCTURES, INC.</div> <div><div>1 WALLACE AVE. SOUTH PORTLAND, ME 04106</div><div>PHONE (207) 780-6722 FAX. (207) 780-6726</div><div> TENCA 1979</div></div>									
STRUCTURE: PRINCIPAL ARTERIAL OVER WHETSTONE BROOK STATE ROUTE VT9, BRIDGE NO. 48 TOWN OF MARLBORO/COUNTY OF WINDHAM STATE OF VERMONT AGENCY OF TRANSPORTATION					DRAWN: SL		DATE: 04/16		
					CHKD: RA		DATE: 04/22		
LOCATION: MARLBORO / WINDHAM, VT					JOB NO.		DWG NO.		
PROJ NO. BRF 010-1(43)					570-2		E1		
CUSTOMER: RENAUD BROS., INC.							REV. 		

ABM INFO		SHIP		BILL OF MATERIAL				JOB NO.		DRAWING NO.		REV.	
								570-2		FB1			
PAGE	LINE	MARK	QTY	MARK	MATERIAL	LENGTH		REMARKS		WT	PROCUREMENT NOTES		
						FT	INCHES						
			320		A325 TYP 3 7/8"		2 1/4	1FL DTIS WASHER					

FIELD BOLT LIST						A325 TYPE 3 BOLTS											
LINE	NO REQ'D	BOLT DIAM.	BOLT LEN.	BOLTS /CONN.	NO OF /CONN.	GRIP*	THICK. OF PCS. CONNECTED						WASH CODE	PIECES CONNECTED AND REMARKS			
1	320	7/8"Ø	2 1/4"	8	40	1 5/8"	7/16	1/2					1	DIAPHRAGM TO GIRDER CONNECTION PLATE			
* GRIP LENGTHS EXCLUDE WASHER THICKNESS														1: 1 HARD DTI'S/LOAD INDICATOR FLAT WASHER 2: 2 HARD DTI'S/LOAD INDICATOR FLAT WASHERS			

0									
REV.	DATE	REMARKS				DWN	CHK	APVL	SHOP
MATERIAL:		SURFACE PREP. & PAINT:		HOLES: AS NOTED		SHOP BOLTS: AS NOTED			
DESCRIPTION:		FIELD BOLTS LIST							
<div><div><div>CASCO BAY STEEL STRUCTURES, INC.</div></div><div>1 WALLACE AVE. SOUTH PORTLAND, ME 04106</div><div>PHONE (207) 780-6722 FAX. (207) 780-6726</div><div><div>TENCA 1379</div></div></div>									
STRUCTURE: PRINCIPAL ARTERIAL OVER WHETSTONE BROOK STATE ROUTE VT9, BRIDGE NO. 48 TOWN OF MARLBORO/COUNTY OF WINDHAM STATE OF VERMONT AGENCY OF TRANSPORTATION						DRAWN: SL		DATE: 04/17	
						CHKD: RA		DATE: 04/22	
LOCATION: MARLBORO / WINDHAM, VT						JOB NO.		DWG NO.	
PROJ NO. BRF 010-1(43)						570-2		FB1	
CUSTOMER: RENAUD BROS., INC.								REV. 	

WORK THIS DRAWING WITH E1

GENERAL NOTES

CONSTRUCTION SPECIFICATIONS

- 1). ALL MATERIAL AND CONSTRUCTION SHALL CONFORM TO STATE OF VERMONT, AGENCY OF TRANSPORTATION STANDARD SPECIFICATIONS FOR CONSTRUCTION, DATED 2011, AND ITS LATEST REVISIONS, AND THE AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS (A.A.S.H.T.O.) STANDARD SPECIFICATIONS FOR HIGHWAY BRIDGES, SIXTEENTH EDITION, AND ITS LATEST REVISIONS.

MATERIEL SPECIFICATIONS

- 1). UNLESS NOTED, ALL NEW STRUCTURAL STEEL CONFORM TO AASHTO M270 GRADE 50W (ASTM A709-50W).
- 2). MATERIAL NOTED "CVN" ON DETAIL DRAWINGS SHALL BE CHARPY V-NOTCH TESTED IN ACCORDANCE WITH THE REQUIREMENTS OF VERMONT STANDARD SPECIFICATIONS (SUBSECTION 714.01).
- 3). HIGH STRENGTH BOLTS: AASHTO M164 (ASTM A325) TYPE 3, 7/8" DIA. IN 15/16" DIAMETER HOLES.

FABRICATION

- 1). BOLT HOLES SHALL BE FABRICATED TO THE REQUIREMENTS OF THE 2012 AASHTO LRFD BRIDGE CONSTRUCTION SPECIFICATIONS, SECTION 11.4.8, EXCEPT THAT HOLES SHALL NOT BE PUNCHED FULL SIZE.
- 2). STUDS ARE FURNISHED AND FIELD INSTALLED BY OTHERS.
- 3). IDENTIFICATION MARKS ON UNPAINTED STEEL SHALL BE IMPRESSED INTO THE MEMBER (WITH A LOW-STRESS STAMP) IN A NON-STRESSED OR LOW STRESSED AREA OF THE MEMBER.
- 4). TIGHT FIT (WELDED ENDS ONLY). 50% OF THE PROJECTED BEARING AREA SHALL BE IN CONTACT WITHIN 0.5mm (0.02") WITH A PERMISSIBLE VARIATION OF 1.6mm (1/16") FOR THE REMAINING 50% OF THE PROJECTED AREA.
- 5). GRIND TO BEAR. 75% OF THE PROJECTED AREA SHALL BE IN CONTACT WITHIN 0.25mm (0.01") WITH A PERMISSIBLE VARIATION OF 0.8mm (1/32") FOR THE PROJECTED AREA.
- 6). MILL TO BEAR. 100% OF THE PROJECTED AREA SHALL BE IN FULL CONTACT.

WELDING

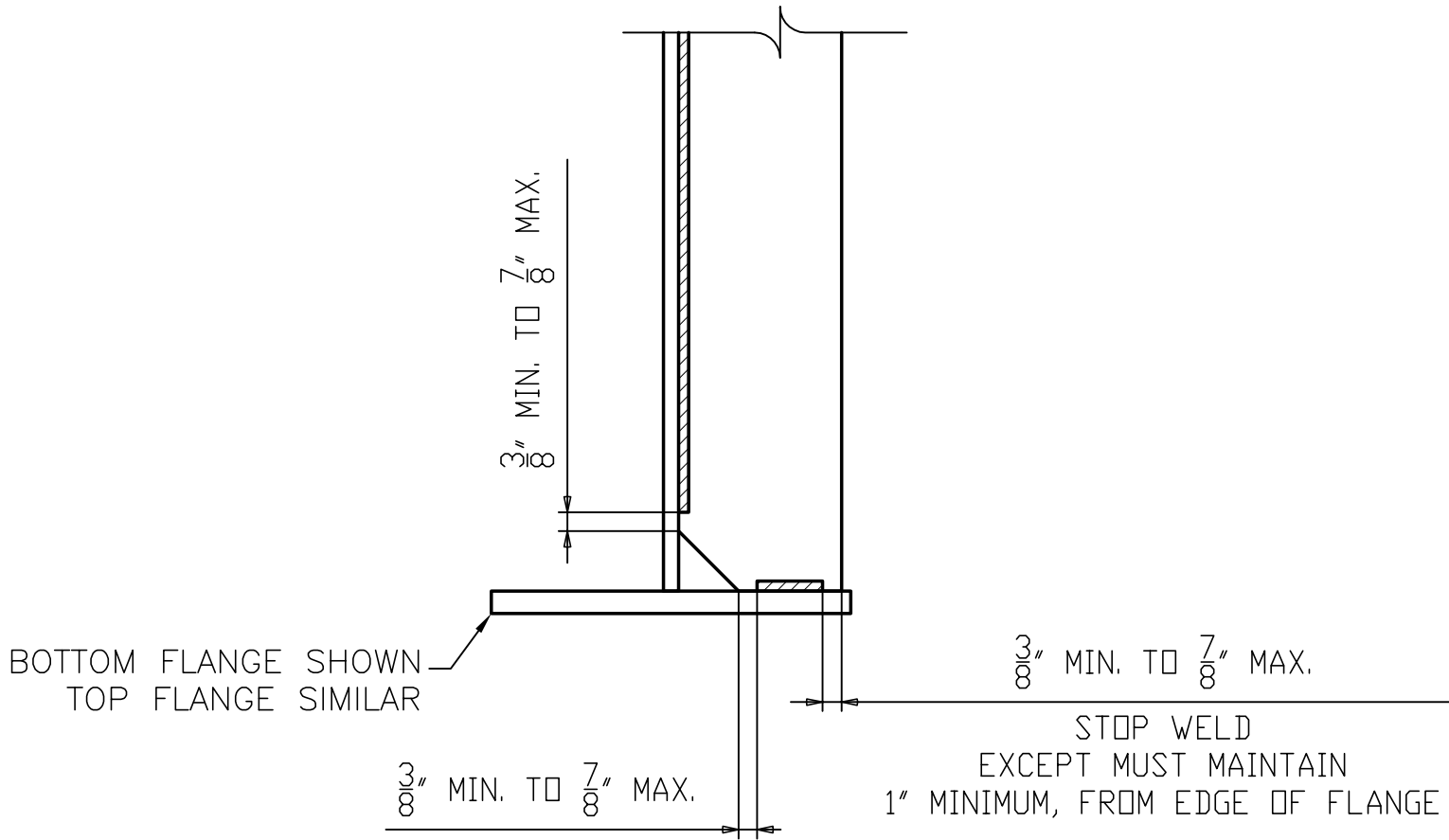
- 1). THE CONFIGURATION OF THE WELD JOINTS AND ALL WELDING PROCEDURES SHALL BE IN ACCORDANCE WITH AASHTO/AWS D1.5-02 BRIDGE WELDING CODE AND WITH SPECIFICATIONS SHOWN BESIDE. ALL WELDING WILL BE DETAILED TO PRE-QUALIFIED JOINTS, UNLESS PROHIBITED BY THE DESIGNER.
- 2). WELDING OF MAIN LOAD CARRYING MEMBERS AND ATTACHMENTS SHALL BE PERFORMED USING THE AUTOMATIC SUBMERGE ARC & SHIELDED METAL ARC PROCESS. ALL WELDS ARE CONTINUOUS U.N.
- 3). NON-DESTRUCTIVE TESTING OF WELDS SHALL BE IN ACCORDANCE WITH THE REFERENCED SPECIFICATIONS.

FIELD CONNECTIONS




- 1). ALL FIELD CONNECTIONS SHALL BE MADE WITH 7/8" DIAMETER HIGH STRENGTH BOLTS AASHTO M164 (ASTM A325) TYPE 3, IN 15/16" DIAMETER HOLES UNLESS OTHERWISE NOTED. INSTALLED PER 506.19(c) AND SPECIAL PROVISIONS.
- 2). BOLTS SHALL HAVE HEAVY HEX. NUT, HEX. HEAD AND ONE DTI'S/LOAD INDICATOR FLAT WASHER EACH (WASHER TO BE PLACED UNDER TURNED ELEMENT).
- 3). PIECE MARKS WILL BE LOCATED AS SHOWN ON ERECTION DRAWING.
- 4). BOLTS INSTALLED WITH THE STEM VERTICAL SHALL HAVE HEADS UP. BOLTS INSTALLED WITH THE STEM HORIZONTAL SHALL HAVE HEADS TOWARDS THE WEATHER UNLESS CLEARANCE RESTRICTIONS DICTATE OTHERWISE.

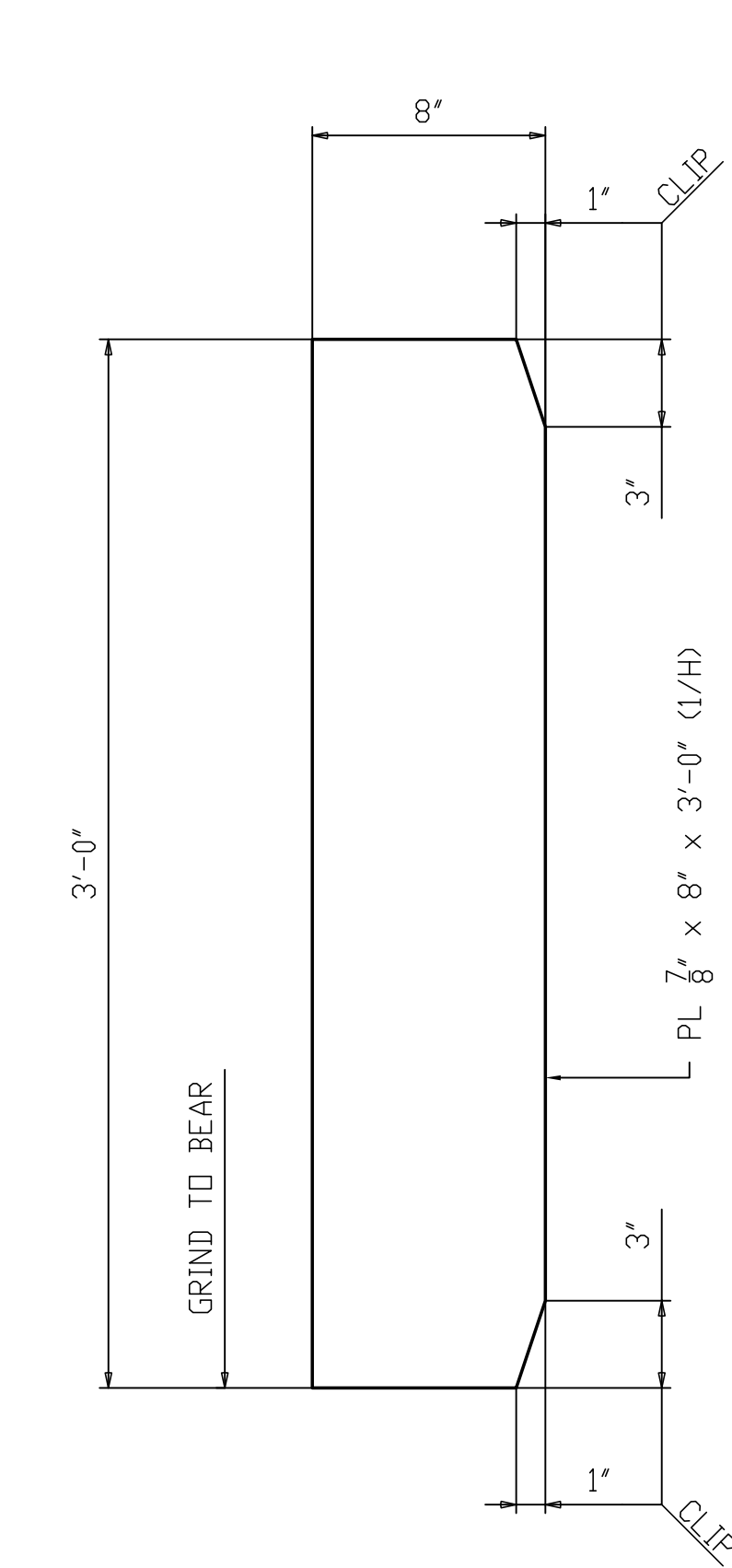
CLEANING:

- 1). ALL STEEL THAT WILL REMAIN UNPAINTED SHALL BE BLAST CLEANED AS PER SSPC SP-10 PER SPEC. 506.14(a).

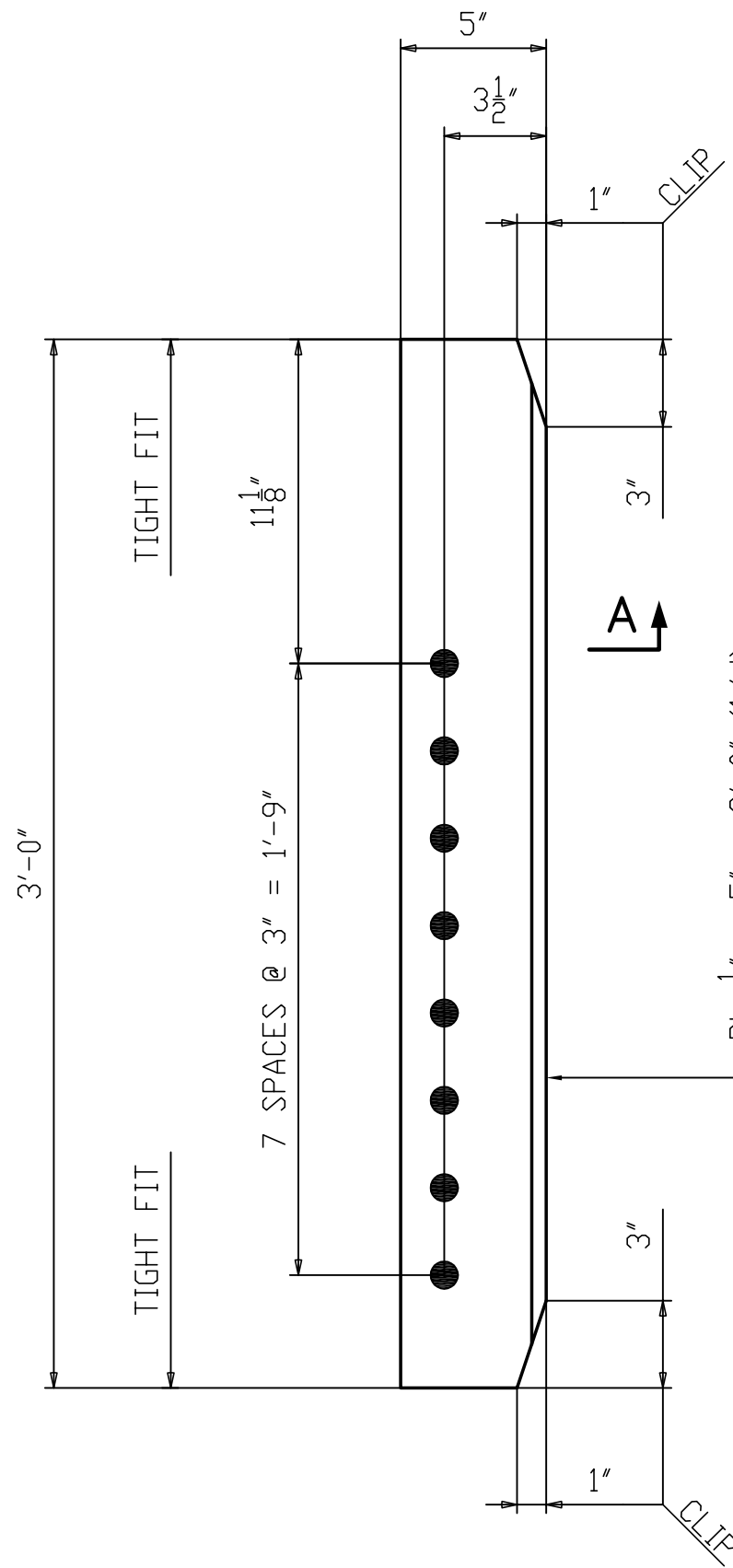


DETAIL "WS1"
STIFF. WELD TERMINATION

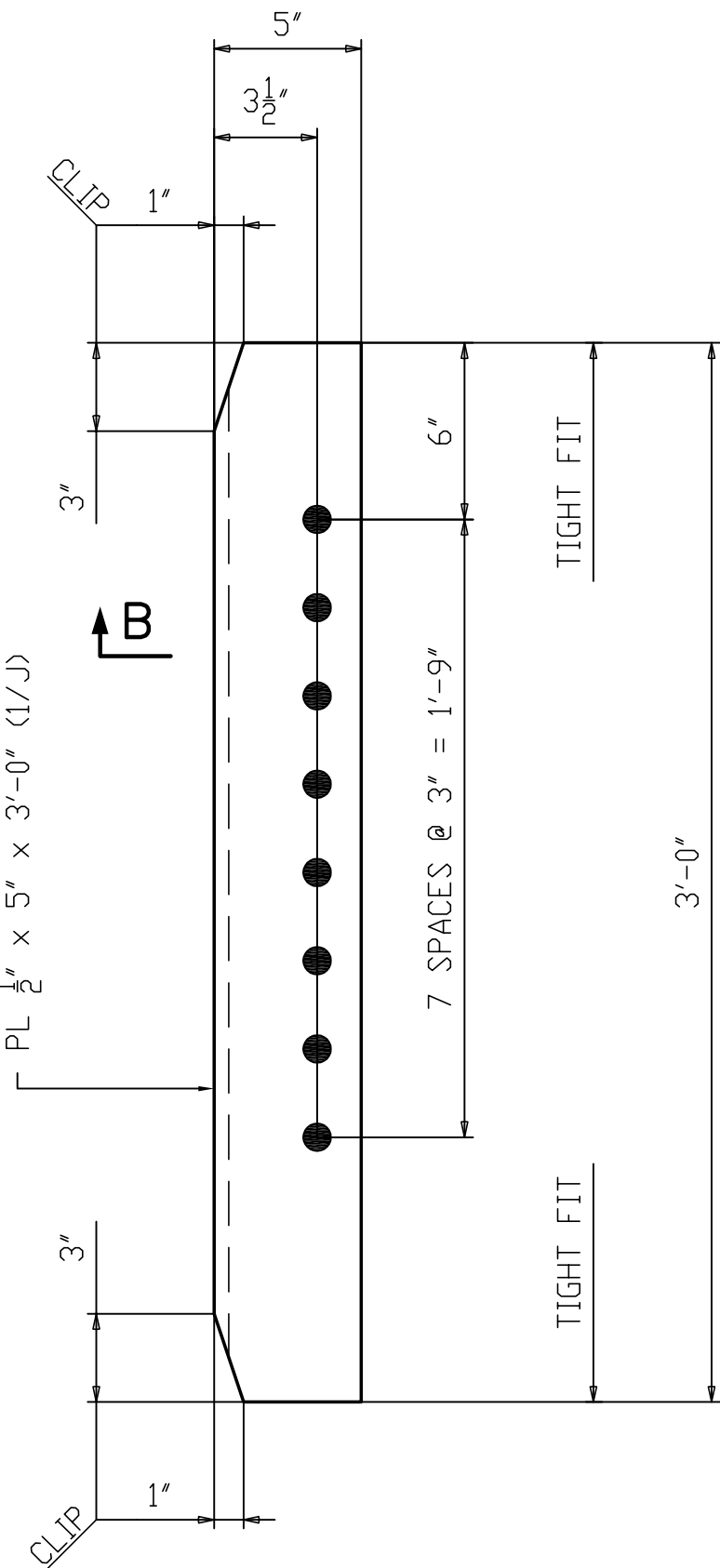
0									
REV.	DATE	REMARKS				DWN	CHK	APVL	SHOP
MATERIAL:		SURFACE PREP. & PAINT:		HOLES: AS NOTED		SHOP BOLTS: AS NOTED			
DESCRIPTION:		GENERAL NOTES							
<div><div><div></div><div><div>CASCO BAY STEEL STRUCTURES, INC.</div><div>1 WALLACE AVE. PHONE (207) 780-6722</div><div>SOUTH PORTLAND, ME 04106 FAX. (207) 780-6726</div></div><div><div></div><div>TENCA 1379</div></div></div></div>									
STRUCTURE: PRINCIPAL ARTERIAL OVER WHETSTONE BROOK STATE ROUTE VT9, BRIDGE NO. 48 TOWN OF MARLBORO/COUNTY OF WINDHAM STATE OF VERMONT AGENCY OF TRANSPORTATION						DRAWN: SL		DATE: 04/16	
						CHKD: RA		DATE: 04/22	
LOCATION: MARLBORO / WINDHAM, VT						JOB NO.		DWG NO.	
PROJ NO. BRF 010-1(43)						570-2		GN1	
CUSTOMER: RENAUD BROS., INC.								REV. 	



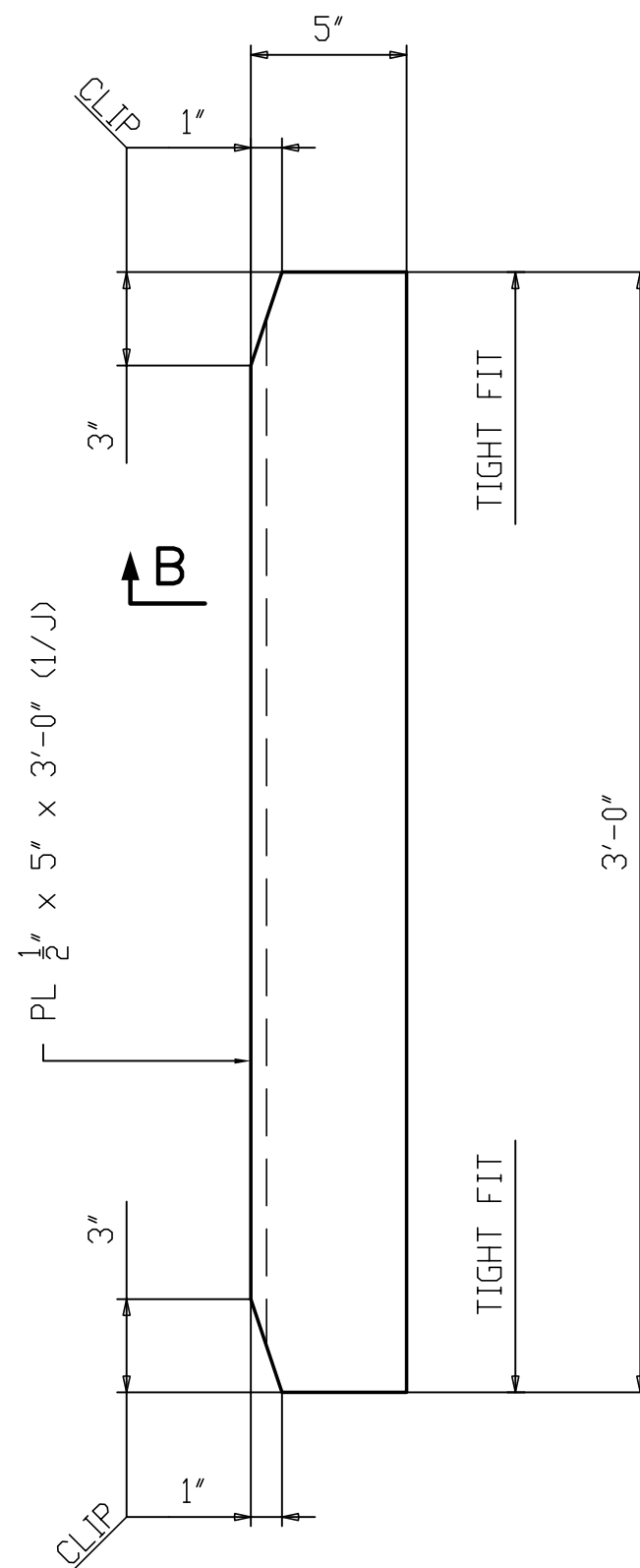
24 ~ BEARING STIFFENER ~ x1a
ABUTMENTS 1 & 2



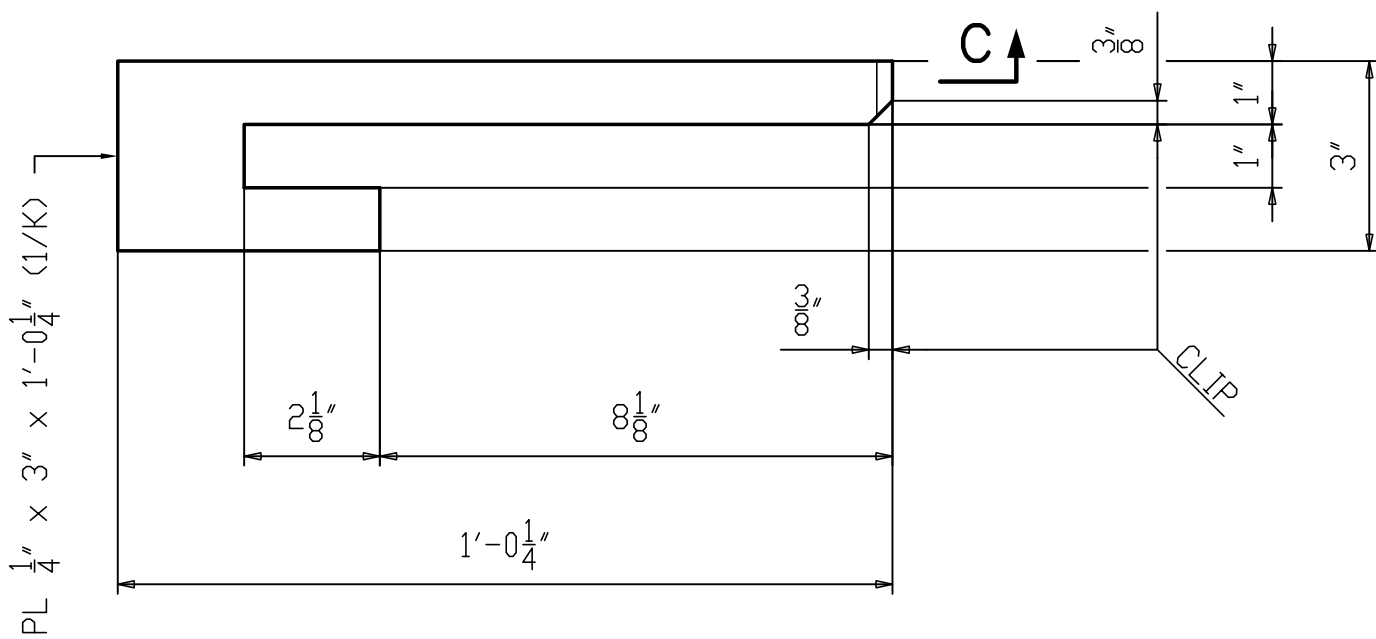
20 ~ INTERMEDIATE STIFFENER ~ x1b
INTERMEDIATE



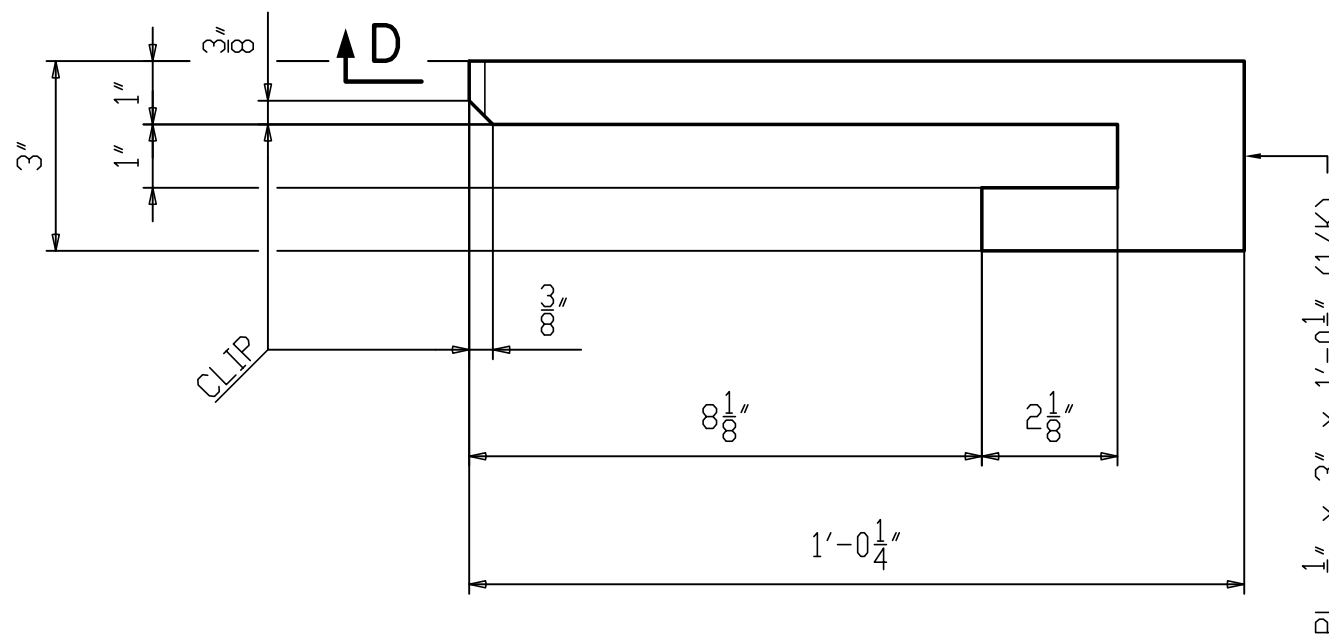
16 ~ INTERMEDIATE STIFFENER ~ x1c
INTERMEDIATE



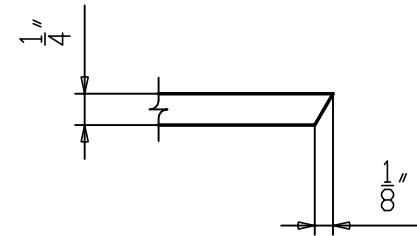
4 ~ INTERMEDIATE STIFFENER ~ x1d
INTERMEDIATE



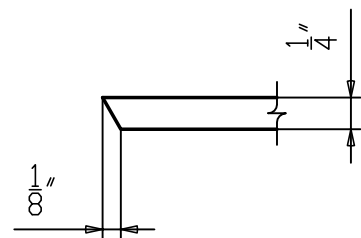
1 ~ DRIP BAR ~ x1f
GIRDER 1G1A @ ABUTMENT 2



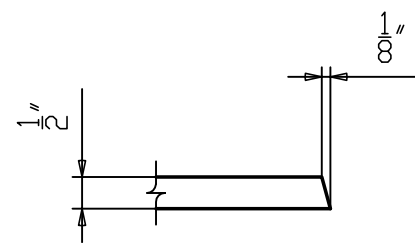
1 ~ DRIP BAR ~ x1g
GIRDER 6G6A @ ABUTMENT 2



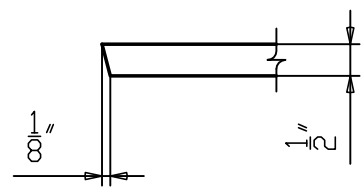
SECT C



SECT D





SECT A



SECT B

NOTES:

1. FOR GENERAL NOTES SEE SHEET GN1.

	0								
REV.	DATE	REMARKS				DWN	CHK	APVL	SHOP
MATERIAL:		SURFACE PREP. & PAINT:		HOLES:		SHOP BOLTS:			
A709-50W U.N.		SEE DWG. GNI		15/16" Ø U.N.		NONE			
DESCRIPTION:		GIRDER STANDARD DETAILS							
CASCO BAY STEEL STRUCTURES, INC.									
		1 WALLACE AVE.				PHONE (207) 780-6722			
		SOUTH PORTLAND, ME 04106				FAX. (207) 780-6726		TENCA 1379	
STRUCTURE: PRINCIPAL ARTERIAL OVER WHETSTONE BROOK STATE ROUTE VT9, BRIDGE NO. 48 TOWN OF MARLBORO/COUNTY OF WINDHAM STATE OF VERMONT AGENCY OF TRANSPORTATION						DRAWN: SL		DATE: 04/17	
LOCATION: MARLBORO / WINDHAM, VT						CHKD: RA		DATE: 04/23	
PROJ NO. BRF 010-1(43)						JOB NO.		DWG NO.	
CUSTOMER: RENAUD BROS., INC.						570-2		X1	
								REV. 